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User Opinion and Satisfaction about Library Information Resources in Engineering College Libraries

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ABSTRACT

The present paper examined user opinion and satisfaction about library information resources in engineering college libraries. The tool employed for collecting data is a questionnaire. The questionnaire is designed in such a way to collect the data from faculty members of engineering college libraries. Questionnaires were circulated among 890 library users and received 705 responses. The response rate is 79%. It is evident from the study majority 63.54% of respondents are male users. 53.75% majority of respondent users are Assistant Professors. The research found that most respondents visit the library daily, feel that the library had convenient working hours, a library for borrowing books, reference books, and electronic journals. The research highlighted that most of the library users opinioned as somewhat useful about library and information resources. Most respondents respond as satisfied and not availing and the second-highest of users respond as highly satisfied about library and information resources. The Study suggested that engineering college libraries should provide standard electronic databases and regularly conduct orientation programs using resources based on their levels.

Keywords: Higher Education, Engineering Education, Engineering Colleges, Academic Libraries, Library and Information Services, and Resources

INTRODUCTION

The resources which store the information electronically and are accessed with the help of electronic systems and networks are called as electronic resources. The electronic resources are the collection of data in the form of either text, graphical, multimedia; numerical which are available both freely and commercially for the users. The term Electronic resources is used as a broader sense and include various items such as e-journals, e-books, CD-ROMs, OPAC, web publishing, wireless publishing, online databases, e-thesis, internet resources, electronic links, e-dissertations, e-mail publishing, bibliographic databases, search engines, print on demand.

ENGINEERING EDUCATION

The resources that store the information electronically and accessed with electronic systems and networks are called electronic resources. Electronic resources are data collection in either text, graphical, multimedia, or numerical, available both freely and commercially. The term Electronic resources are used in a broader sense and include various items such as e-journals, e-books, CD-ROMs, OPAC, web publishing, wireless publishing, online databases, e-thesis, internet resources, electronic links, e-dissertations, e-mail publishing, bibliographic databases, search engines, print on demand.

ENGINEERING EDUCATION

Engineering aims to provide solutions to society's apparent problems with a focus on developing scientific knowledge. This stream helped revolutionize society from normal society to an industrialized society to a technology-driven society over the years. The primary objective of engineering education is to better the community by introducing and implementing technical applications in the human race's day-to-day activities. Engineers understand the reality and access the problems to provide a beneficial solution to these prevailing problems.

ENGINEERING EDUCATION IN INDIA

India is one of the oldest civilizations globally, which has seen Aryan tribes and Dravidian inhabitants forming the classical Indian culture followed by the Arab culture, Turkish culture, European culture, and finally the British colonial system. Various inventions revolutionized humanity in their way of living. The formal engineering education system was laid during the British rule in the country. Engineering education in India was initiated way back in 1794 where

the Survey School was established in Madras to impart education in the modern land survey. The first engineering college started in 1847 at Roorkee, with a particular focus on Civil Engineering. Subsequently, the need for engineering education was identified, and three more engineering colleges were started by the British government at Madras, Bombay, and Bengal in the year 1856. Later in 1887, Victoria Jubilee Technical Institute was created in Bombay to educate in Mechanical, Electrical, and Textile Engineering. With time, the significance of technical education had gained importance. Several institutions were established by both the government and private players to impart technical education to students of the country.

Some of the prominent engineering institutions established in the country over the years include the College of Engineering at Gundy, Banaras Hindu University, Visvesvaraya College of Engineering. Several committees were formed to evolve the strategies and pave the path for developing engineering education. Sarkar Committee suggested starting technical institutions across the country to impart advanced technical education in the country. As part of this Indian Institute of Technology (IITs) were Kharagpur, Delhi, Kanpur, Madras, and Bombay. All India Council of Technical Education (AICTE) was formed in 1945. After independence, it was perceived by the rulers that the economic development of India is possible with the help of engineers and engineering education. Based on this perception, the establishment of engineering institutions across the country and at different levels with developed countries was undertaken. Technical Institutions were established along with various programs and initiatives during the next five-year plans in the country, resulting in vast reservoirs of a technically trained workforce. Technical education had significant contributions to the scientific and industrial development of the country. The country's abundant resources of educated, trained, and competent crew are assets in the modern world.

Review of Literature

Kannappanavar and Manjunatha (2011) studied Library Resources and Services of Engineering Colleges in Karnataka. The data collected from 45 engineering college libraries are analyzed and explored using the status of resources and services provided to the users. Some of the colleges have rich collections and infrastructure facilities, which have to share with other colleges. In the era of information technology, computers and communication infrastructure are prerequisites; hence, libraries provide more funds and trained workforce to maintain and extend better library

service to the engineering college library users. Owing to the tremendous expansion of knowledge and its dissemination through a great variety of media, the organization of information services in engineering college libraries requires new technology and methods to benefit the users. The information has been recognized as a vital resource. Its need in decision-making, an extension of knowledge, and conservation of research efforts are indispensable.

Praveen Kumar (2012) described the current position of libraries in the ICT environment in Haryana state. The Study was performed via a questionnaire survey of the librarian and users confined only to engineering college libraries with ICT based resources and services. Various services provided by libraries with the support of Information & Communication Technologies to their users have been observed and discussed with the library professionals and their users. It also evaluates the users' attitudes, awareness, and satisfaction with the library services provided with ICT support. The study results revealed that the ICT based resource used by the largest percentage of users was the e-resources.

Pandey (2014) examined and analyzed the users' satisfaction with library resources and services among the faculty members and students of government engineering colleges of Guru Gobind Singh Indraprastha University (GGSIP), Delhi. The present Study demonstrates users' satisfaction levels towards various library resources and services provided by the engineering college library. The Study found that a large number of respondents were satisfied with library resources and services. It also finds that the books had become the most widely used resources and circulation services emerged the most preferred library service.

Kannappanavar and Jayaprakash (2014) discussed the information sources and services available in the Goa state's engineering colleges. The Study highlights professional education in Goa State. The research examined that the available professional staff is insufficient to extend the information services to their clients. Goa College of Architecture has a low collection; most colleges are not allocated a separate budget for the Information Technology application. The majority of the colleges under the Study are automated their routine work in the library.

Archana and others (2014) examined the use of Information and Communication Technology (ICT) based resources and services and their impact on users. The Study was performed via a questionnaire survey of the library users. The papers also determine users' satisfaction level regarding online services, favorite search engines, and problems the users face in using the ICT

in libraries. Users proposed various measures of formal orientation and training in ICT based resources and services to become more effective users.

Ali Ahamed (2014) studied electronic resources in selected engineering college libraries of Chittor district. Analysis of data collected from a simple random sample of 150 users of Sri Vidyaniketan and Sreenivasa Institute libraries about their use of Electronic Resources using questionnaire method reveals that most of the students (54.89%) use online journals. Most users (61.73%) replied that they have to access online journals from the library. (60.49%) find the online journals are useful for their course work. Less than half of the students (43.21%) are using online journals, (22.83%) of them are delighted, (16.05%) of them are neither satisfied nor dissatisfied, and (17.91%) of them are disappointed. 'No proper guidance for using online journals,' 'Internet access is very low,' 'insufficient numbers of computers' are the major problems faced by the users in the use of online journals. A number of suggestions have been made to increase the usage of e-resources in the libraries of Sri Vidyaniketan and Sreenivasa Institute.

Mehar and Ajay Kumar (2015) studied about library resources and services of the selected university libraries in Haryana state. The research discussed functioning the library resources and benefits of the university libraries. The Study highlighted collection development, library membership, staff position, working hours, services accessible and electronic resources subscribed by the university libraries.

Ramakrishna and others (2015) examined the status of online resources in selected Deemed university libraries. The study efforts to present inclusive and up to date information about the number of online resources subscribed and a number of online resources available in the university libraries, based upon the findings. This Study suggested that it is a need to strengthen the services affecting online resources are have been given.

Geetha and others (2016) identified and document how the resources and services of libraries are being utilized by the students of two engineering college libraries (PESITM and JNNCE) in Shivamogga city. The study sample consisted of 194 students from two colleges. The findings of the Study revealed that the difficulties in locating the needed materials by the students and lack of latest collection are real for both college libraries, and are the significant causes amongst other problems. The observed difference between PESITM and JNNCE in this comparative Study is substantial. Services offered in both libraries differ in some cases, such as Digital library, Virtual

library, and E-resources. Recommendations from the Study presented are: two studied libraries should improve physical facilities such as study rooms, proper lighting, and ventilation, etc.; and speed up and complete the computerization of services.

Ramakrishna and others (2016) examined the status and usage of library resources and services and library use opinion about library working hours, physical library facilities, library information sources, and service university library. The Study covers collection development, library membership, staff position, working hours, library automation, services offered, and availability of online resources are also discussed. The Study observed that most library users are delighted with library facilities, library working hours, information sources, and library information services.

Ramakrishna and others (2016) studied the usage of library resources and services of RSVP. The Study covered collection development, library membership, staff position; working hours, library automation, services offered, and availability of online resources are also discussed. The Study observed that that majority 47.22% of the respondents belongs to postgraduate students, majority 21.11% of users visiting daily, 36.11% of users visiting library research purpose, majority 28.80% of users using books lending service; here users convey their majority opinion about library working hours (36.11%), physical facilities (48.33%), Library information services (37.22%) and library information resources (37.77%). The study exposed that the library users are delighted with library facilities, library working hours, information sources, and library information services.

Tallolli and Mulla (2016) studied Information Resource and Library Services Literacy through the Engineering College Libraries website. In engineering, the education library has played a vital role in developing the organization's education and knowledge output. The library wants to provide needed information when required to the students. They often need to include reams of information in a way that makes everything easy to explore, and it's a great challenge. This research aims to highlight some points that will show the importance of library websites to create awareness of the library resources and services to improve the help and service to the user community.

Ramakrishna and others (2016) examined the library information resources and services of selected Deemed to be University libraries. The Study exposed collection development, library

membership, staff position, working hours, library automation, services offered, and online resources availability.

Giddaiah (2017) studied library services and facilities of university libraries. The Study revealed that most of the librarians stated that they provided recent additions list, web OPAC, online databases, access to the internet, electronic journals service, and access to internet resources through library portals. Most of the universities covered under the present Study have also leased line or V-SAT or both for internet connection, even from BSNL, NKM, or ERNET or all three universities. It was found that Kuvempu university library, in addition to 24, was providing special internet services for schedule caste and schedule tribes with 15 computers internet nodes to at free of cost access.

Aravind (2017) studied the usage of electronic resources among engineering colleges in the Dindigul district. The primary data are collected from the respondents at engineering colleges by using a questionnaire. A sample, including engineering students, was chosen from 5 selected engineering colleges in the Dindigul district. A total number of 250 questionnaires were distributed. From this Study, it is clear that the majority of the respondents report the privacy problem is the prime problem in using electronic resources, and they need workshops and classes for the effective use of electronic resources.

Ramakrishna and others (2017) described collection development, library membership, staff position, working hours, library automation, usage of library resources and services of selected deemed universities, distributed 1000, and collected 914 responses. The Study found that all selected university libraries maintain useful collection library resources, services, and most library users expressed their opinion about library working hours, physical facility, library information resources, and services excellent and valuable.

Sharma (2018) studied e-resources and their use in private engineering college libraries Pushpa Sharma research scholar Mewar University. Now a day's availability of e-resources in engineering college libraries is widespread. But their proper and maximum use is also a matter of concern and exploration. This paper gives an overview of the major of e-resources viz. CD ROM databases, online databases, and E-journals. A brief idea regarding this. This paper aims to highlight the use of e-resources in the best engineering college libraries of UP State. An attempt is made to find out the status of e-resources in engineering college libraries. The preliminary

Studystudy analysis reveals that there is not a sufficient number of e-resources that could justify the needs of the users.

Varadaraju (2018) studied library resources and services at Stanely College of engineering and technology. This Study aimed at the frequency of library usage, the extent of use of library resources and services by the students and faculty. The level of satisfaction against library resources and assistance, the problems faced while using the library resources and services. A questionnaire was randomly given to 100 students and faculty of the college. A total of 92 filled-in questionnaires were returned to the researcher. i.e., the response rate is 92%. It is suggested that the college library should take the initiative to counter problems expressed by users to provide effective and efficient library and information services to the clientele, and it would in turn help faculty, students.

Ramakrishna and others (2018) examined user opinion about the effectiveness of library and information services of K L Deemed to be University. The Study observed that most library users expressed their opinion on the efficacy of library services as very useful and practical; the majority, 42 percent of users, said their opinion on interlibrary loan service responds as ineffective, and 34% of library users respond as inadequate. Lastly, most of the research scholars satisfied with the resources and benefits of the university library.

Satheesha and Mallikarjun (2018) described the role of selected Engineering college libraries in Karnataka, India, in higher education and engineering research. This paper comprehensively studies the functioning, resources, and services of these libraries. The collection development, library membership, staff position, working hours, services offered, and e-resources subscribed by these libraries are also discussed.

Gowridevi and others (2018) studied the effectiveness and usage of library information resources and GITAM University services. The investigator distributed a questionnaire among 150 research scholars from all departments. One hundred twenty respondents are submitting filled questionnaires. The Study observed that most library users are delighted with library and resources and services, 75 percent of users beneficial on library and information sources, and most 81 percent of research scholars respond very useful to library and information services.

Shivakumaraswamy (2019) focused on the Use of Web-Based Library Services in Mysore City Engineering Colleges. The Study covers Web-Based Reference, Acquisition, Circulation,

Cataloguing, Periodical Services, ILL/Document Delivery services, problems in accessing Web-based library services by users of engineering college libraries of Mysuru city. We were also consulted to design the questionnaire. A well-designed questionnaire was an issue for engineering college students in Mysuru city. Altogether 300 questionnaires were issued personally to users of engineering college students of Mysuru city, and 250 were collected with a response rate of 83.3%. Essential statistical techniques (SPSS) and methods will be used to examine the research data. The results given in table 7.8 reveal that online general library policies'. It is observed that the highest respondents scoring 136(54.4%) say 'highly useful,' and only a few accounting replayed 3(1.2%) of the state 'moderately useful' with the highest mean value of 4.30 and SD being .980.

Raja Suresh Kumar and others (2020) examined Electronic Resources in Engineering College Libraries in Krishna District, Andhra Pradesh, India. In this Study, collecting primary data for the present Study, the investigator adopted the survey method. The tool employed for collecting data is the questionnaire. The questionnaire is designed in such a way to collect the data from the library users (faculty members) of engineering college libraries. Questionnaires were circulated among 890 library users, out of whom 705 responses were received, representing 79% of the total sample to whom the questionnaire was distributed. It is evident from the analysis that 448 (63.54%) majority of respondents are male users, 379 (53.75%) majority of respondent users are Assistant Professors, 259 (36.73%) majority of respondents visit the library daily, 631 (89.50%) respondents who feel that the library had convenient working hours. The Study found that most users visit the library to borrow books, reference books, and electronic journals. The Study found that a majority of users use IEEE, SCOPUS, Springer, NPTEL services. The study found that highly satisfied with IEEE facility, DELNET facility, NPTEL Videos, and 419 (59.43%) do not avail CMIE Prowess's facility. Finally, the study suggested that the users are not aware of some electronic information resources, so that the engineering college libraries will conduct information literacy programs on electronic resources.

SCOPE OF THE STUDY

The Study covered thirty-five Engineering College Libraries in Krishna district, the state of Andhra Pradesh, India.

STATEMENT OF THE PROBLEM

The present Study is envisaged under the title of "User Opinion and Satisfaction about Library Information Resources in Engineering College Libraries."

OBJECTIVES OF THE STUDY

- To study the frequency of visiting university libraries.
- To study the purpose of visiting the library.
- To study user opinion on the convenience of the library working hours.
- To study User Opinion on Library and Information Resources in Engineering College Libraries.
- To study Satisfaction Levels on the Usage of the Library and Information Resources.

SAMPLE SIZE

In the present research, the Krishna district's engineering colleges, Andhra Pradesh, India, are considered for the task. There are 35 engineering colleges under the investigation, and five questionnaires for each department are issued for collecting the information. Eight hundred ninety questionnaires were distributed to the faculty members of these engineering colleges. The sampling technique for the survey is Snowball Sampling Technique (reference-based method) and convenience-sampling method. This method is selected by considering the time factor for the Study and population. Out of the 890 questionnaires distributed to the respondents, 705 filled questionnaires were received back, and these are considered for the analysis.

METHODOLOGY

Different methods and procedures are used to gather data for qualitative research, including survey method, historical method, descriptive method, and case study method. For collecting primary data for the present study, the investigator adopted the survey method. The tool employed for collecting data is the questionnaire. The questionnaire is designed in such a way to collect the data from the library users (faculty members) of engineering college libraries in Krishna district, Andhra Pradesh, India. The observation and interview techniques are also used wherever they are necessary to collect primary data. The data collected is analyzed in light of the objectives stated.

DATA ANALYSIS OF THE STUDY

1. Gender wise distribution of the respondents

Table No. 1
Gender wise distribution of the Respondents

Gender	Total	Percentage
Female	257	36.45%
Male	448	63.54%
Total	**705**	**100.00%**

The above table and figure describe the respondents' gender-wise distribution from the various engineering colleges under the Study. 63.54% of users are male, and the remaining 36.45% of respondents are female.

2. Designation wise distribution of the respondents

Table No. 2
Designation wise distribution of the Respondents

Designation	Total	Percentage
Assistant Professor	379	53.75%
Associate Professor	258	36.59%
Professor	68	9.64%
Grand Total	**705**	**100.00%**

The above table and figure describe the distribution of the respondents based on their work position. There are 53.75% of Assistant Professors, and these are the highest number of respondents, followed by Associate Professors who are in several 36.59 % and followed by Professors with 9.64% respondents.

3. Branch wise distribution of the respondents

Table No. 3
Branch wise distribution of the Respondents

Branch	Count	Percentage
CIV	126	17.87%
CSE	151	21.41%
ECE	143	20.28%
EEE	128	18.15%
IT	28	3.97%
MEC	129	18.29%
Total	**705**	**100.00%**

The above table and figure describe the Branch wise distribution of the respondents. Out of the total 705 respondents, there is 21.41% from the CSE branch, 20.28% from the ECE branch, 18.29% respondents from the MEC branch, and 18.15% from the EEE, 17.87% respondents from the CIVIL department, and finally 3.97% from IT branch.

4. Frequency of Library Visit by the respondents

Table No. 4
Frequency of Library Visit by the Respondents

Frequency of Visit	Count	Percentage
Daily	259	36.73%
Once in a Week	96	13.61%
Twice in a Week	65	9.21%
Thrice in a Week	54	7.65%
Fortnightly	141	20%
Once in a Month	69	9.78%
Occasionally	21	2.97%
Grand Total	**705**	**100.00%**

Above table and figure describes the frequency of library visit by the respondents. There is 36.73% of respondents visit the library daily. 20% visit the library every fortnight, 13.61% respondents see Once in a Week, 9.78% respondents visit Once in a Month, 9.21% respondents

visit Twice in a Week, 54 (7.65%) respondents visit Thrice in a Week, and 21 2.97% respondents visit the library Occasionally.

5. Convenience of the Library Working Hours

Table No. 5
Library has Convenient Working Hours

Convenience of Library Working Hours	Count	Percentage
No	74	10.49%
Yes	631	89.50%
Total	**705**	**100.00%**

The above table and figure describe the respondents' responses about the convenience of the Library Working hours. 89.50% of respondents feel that the library had convenient working hours, and 10.49% of respondents think the library doesn't have convenient working hours.

6. Purpose of Visiting the Library

Table No.6
Purpose of Visiting the Library

Purpose		Assistant Professor	Associate Professor	Professor
For Borrowing Books	Yes	281(39.86)	216(30.64)	62(8.79)
	No	98(13.90)	42(5.96)	6(0.85)
For Reference Books	Yes	286(40.57)	197(27.94)	53(7.52)
	No	93(13.19)	61(8.65)	15(2.13)
For Preparing Teaching Notes	Yes	285(40.43)	147(20.85)	41(5.82)
	No	94(13.33)	111(15.74)	27(3.83)
For Use of E-Resources	Yes	217(30.78)	160(22.70)	45(6.38)
	No	162(22.98)	98(13.90)	23(3.26)
For Use of AV Resources	Yes	138(19.57)	88(12.48)	22(3.12)
	No	241(34.18)	170(24.11)	46(6.52)
For Project Reports	Yes	180(25.53)	82(11.63)	22(3.12)
	No	199(28.23)	177(25.11)	45(6.38)
For Print Publications	Yes	164(23.26)	142(20.14)	36(5.11)
	No	215(30.50)	116(16.45)	32(4.54)
For Back Volume of Journals	Yes	107(15.18)	113(16.03)	36(5.11)
	No	272(38.58)	145(20.57)	32(4.54)
For Internet Facility	Yes	313(44.40)	227(32.20)	58(8.23)
	No	66(9.36)	31(4.40)	10(8.23)
For News Paper	Yes	204(28.94)	108(15.32)	192.70)
	No	175(24.82)	150(21.28)	49(6.95)
For Refer Govt. Publications	Yes	44(6.24)	31(4.40)	14(1.99)
	No	335(47.52)	227(32.20)	54(7.66)

For Inter Library Loan	Yes	16(2.27)	5(0.71)	4(0.57)
	No	363(51.49)	253(35.89)	64(9.08)

The above table describes the Purpose of the Library Visit. It is evident that 39.86% Assistant Professors, 30.64% Associate Professors and 8.79% Professors visit the Library for Borrowing Books while 13.90% Assistant Professors and 5.96% Associate Professors are and 0.85% Professors are not for availing this facility. 40.57% Assistant Professors, 27.94% Associate Professors, and 7.53% of Professors visit the Library for Reference Books while 13.19% Assistant Professors and 8.65% Associate Professors are not for availing this facility. (40.43% Assistant Professors, 21.85% Associate Professors and 5.82% Professors visit the Library for Preparing Teaching Notes while 15.74% Associate Professors, and 13.33% Assistant Professors are not for availing this facility. 30.78% Assistant Professors, 22.70% Associate Professors, and 6.38% Professors visit the Library for Using the E-resources while 22.98% Assistant Professors and 13.90% Associate Professors are not for availing this facility. 19.57% Assistant Professors and 12.48% Associate Professors visit the Library for Using the AV Resources while 34.33% Assistant Professors, 24.11% Associate Professors, and 6.38% of Professors are not for availing this facility. 25.53% Assistant Professors and 11.63% Associate Professors visit the Library for Referring Project Reports while 28.23% Assistant Professors, 25.11% Associate Professors, and 6.38% of Professors are not for availing this facility. 23.26% Assistant Professors, 20.14% Associate Professors, and 5.11% of Professors visit the Library for Referring Print Publications while 30.503% Assistant Professors and 16.45% Associate Professors are not for availing this facility.

16.03% Associate Professors and 15.18% Assistant Professors visit the Library for Back Volume Journals while 38.58% Assistant Professors and 20.57% Associate Professors are not for availing this facility. 44.40% Assistant Professors, 32.20% Associate Professors, and 8.23% of Professors visit the library for helping Internet Facility while 9.36% of Assistant Professors are not for availing this facility. 29.946% Assistant Professors and 15.32% Associate Professors visit the Library for Reading Newspapers while 24.82% Assistant Professors and 21.28% Associate Professors are not for availing this facility. 6.24% Assistant Professors visit the Library for Referring Government Publications while 47.52% Assistant Professors and 32.20% Associate Professors are not for helping this facility. Only 2.27% of Assistant Professors visit the Library

for Inter-Library Loan while 51.49% Assistant Professors, 35.89% Associate Professors, and 9.08% of Professors are not availing this facility.

7. User Opinion on Library and Information Resources

Table No.7
User Opinion on Library and Information Resources

Opinion	1	2	3	4	5
E-Journals	2(0.28)	3(0.43)	206(29.22)	230(32.62)	264(37.45)
E-Books	0	6(0.85)	274(38.87)	274(38.87)	151(21.42)
Projects	4(0.57)	4(0.57)	368(52.20)	218(30.92)	111(15.74)
Patents / Standards	6(0.85)	15(2.13)	394(55.89)	227(32.20)	63(8.94)
Conference / Seminar proceedings	7(0.99)	9(1.28)	524(74.33)	131(18.58)	34(4.82)
OPAC Search	6(0.85)	19(2.70)	257(36.45)	244(34.61)	179(25.39)
Circulation	4(0.57)	4(0.57)	277(39.29)	301(42.70)	119(16.88)
Reservations of Materials	13(1.84)	12(1.70)	364(51.63)	243(34.47)	73(10.35)
E-mail notification	3(0.43)	12(1.70)	423(60.00)	187(26.52)	80(11.35)
New arrival list	6(0.85)	14(1.99)	497(70.50)	132(18.72)	56(7.94)
Table of content services	6(0.85)	8(1.13)	626(88.79)	35(4.96)	30(4.26)

* 1- Very Ineffective, 2-Ineffective, 3-Somewhat Effective, 4-Effective, 5-Highly Effective.

The above table describes the association between the Designation and the Opinion on Library Resources. It is observed that 37.45% of respondents felt Very Effective, 32.62% of respondents felt Effective; 29.22% of respondents felt Somewhat Effective. A negligible number of respondents felt Ineffective about the E-Journals facility. 38.87% of respondents felt Effective, 38.87% of respondents felt Somewhat Effective, and 21.42% felt Very Effective about the E-Books facility. 55.89% of respondents felt Somewhat Effective, while 30.92% felt Effective, and 15.74% felt Very Effective about the project facility. Similarly, 55.89% of respondents felt Somewhat Effective, while 32.20% felt Effective, and 8.94% felt very Effective about the Patents / Standards facility. 74.33% of respondents felt Somewhat Effective, and 18.58% felt

Effective about the Conference / Seminar Proceedings. 36.45% of respondents felt Somewhat Effective, while 34.61% felt Effective, and 25.39% felt Very Effective about the OPAC Search facility. 42.70% of respondents felt Effective while 39.29% felt Somewhat Effective, and 16.88% felt very Effective about the Circulation facility. 51.63% of respondents felt Somewhat Effective, and 34.47% of respondents felt Effective about the Reservation of Materials facility in the library. 60% of respondents felt Somewhat Effective, while 26.52% felt Effective, and 1.70% felt Ineffective about the E-mail Notification facility from the library. 70.50% of respondents felt Somewhat Effective, while 18.72% felt Effective, and 7.94% felt Very Effective about the New Arrival List facility. And lastly, 88.79% of respondents felt Somewhat Effective about the Table of Content Service facility extended by the library. A negligible percentage of respondents felt ineffective and very ineffective about the various facilities provided through the library.

8. Satisfaction Levels on the Usage of the Library and Information Resources

Table No.8
Satisfaction Levels on the Usage of the Library and Information Resources

Library Resources	**1**	**2**	**3**	**4**	**5**
Books	146(20.71)	0	88(12.48)	234(33.19)	237(33.62)
Print Journals	364(51.63)	5(0.71)	61(8.65)	207(29.36)	68(9.65)
Reference Books	167(23.69)	5(0.71)	110(15.60)	288(40.85)	135(19.15)
Electronic resources	282(40.00)	3(0.43)	74(10.50)	273(38.72)	73(10.35)
Govt. Docs	617(87.52)	2(0.28)	35(4.96)	38(5.39)	13(1.84)
Dissertations	431(61.13)	3(0.43)	93(13.19)	167(23.69)	11(1.56)
Field survey reports	392(55.60)	9(1.28)	110(15.60)	165(23.40)	29(4.11)
Indexing and reference Services	24(3.40)	17(2.41)	358(50.78)	198(28.09)	108(15.33)
Audio Video Services	458(64.96)	12(1.70)	63(8.94)	139(19.72)	33(4.68)
Book reviews	94(13.33)	16(2.27)	423(60.00)	106(15.04)	66(9.36)
Patents and Standards	6(0.85)	12(1.70)	394(55.89)	229(32.48)	64(9.08)
News Papers	370(52.48)	6(0.85)	30(4.26)	218(56.88)	81(11.49)
Internet Services	106(15.04)	20(2.84)	60(8.51)	401(29.08)	118(16.74)
NPTEL Videos	140(19.86)	1(0.14)	86(12.20)	205(29.08)	273(38.72)

*1- Not Availing the facility, 2- Dissatisfied, 3-Neutral, 4-Satisfied, 5- Highly Satisfied.

The above table describes the association between the Designation and the Satisfaction Levels on Library Resources Usage. The table shows that 33.62% are Highly Satisfied with the Books facility while 33.62% are satisfied and 20.71% are Not Availing the Service. With the Print

Journal service, 29.36% are satisfied, 9.65% are Highly Satisfied, 8.56% are Neutral, and 51.63% are Not Availing the Service. With the Reference Books, 40.85% are met, 19.15% are Highly Satisfied, 15.60% are Neutral, and 23.69% are Not Availing the Service. With the Electronic Resources, 38.72% are satisfied, 10.35% are Highly Satisfied and Neutral, while 40% are Not Availing the Service. Regarding the Government Documents, 87.52% are Not Availing the Service while 5.39% are satisfied with the service. 23.69% of respondents are Satisfied with the Dissertations service, while 13.19% are Neutral, and 61.13% are Not Availing the Service. With the Field Survey Reports, 23.40% are satisfied, 15.60% are Neutral, and 55.60% are Not Availing the Service. With the Indexing and Reference Service, 50.78% of respondents are Neutral, while 28.09% are satisfied, 15.33% are Highly Satisfied, and 2.41% are dissatisfied with the service. 64.96% of respondents do not avail of the Audio-Video Services in the library while 19.72% are satisfied, and 8.94% are Neutral about the service. 60.11% of respondents are Neutral about the Books Review service while 15.04% are met, and 13.25% do not avail of the Service. Regarding the News Paper Service, 30.91% of respondents are Satisfied, 11.49% are delighted, and 52.48% do not help the college library's service. 57.12% of respondents are satisfied with the Internet Facility provided in the library, 16.74% are delighted, and 15.04% do not avail of the service. 38.72% of respondents are delighted with the NPTEL Videos service while 29.08% are satisfied, and 12.20% are Neutral, and 19.86% of respondents are not availing of the NPTEL Videos Service in the college library.

FINDINGS OF THE STUDY

1. Gender wise distribution of the Respondents

The Study's clear majority, 64% of respondents' male faculty members, and female respondents are only 36 percent.

2. Designation wise distribution of the respondents

Designation wise distributions of the respondents, 54 percent are Assistant Professors who are the highest number of respondents, 37 percent Associate Professors and 10 percent of respondents are Professors.

3. Branch wise distribution of the respondents

The study majority of respondents from the CSE and ECE departments, the second-highest percentage of users, belong to EEE and Civil departments. Only 7 percent of users respond to the IT department.

4. Frequency of Library Visit by the respondents

The Study's clear majority, 37 percent of respondents visit the library daily, and the second-highest percentage of users visit the library every fortnight.

5. Convenience of the Library Working Hours

The Study found that the majority 89 percent of respondents feel happy about the convenience of library working hours.

6. Purpose of Library Visit the library

The Study's evidence that most faculty members visit the library for borrowing books reference books purpose. The second-highest percentage of library users visiting the library for electronic resources.

7. User Opinion on Library and Information Resources

The Study found that the majority of respondents respond as Very Effective about providing electronic journals. The Study's clear majority of library users respond as somewhat useful about remaining library and information sources.

8. Satisfaction Levels on the Usage of the Library and Information Resources

The Study's clear majority was opinioned as highly satisfied about providing books facility and NPTEL Videos service. The Study found that regarding reaming library resources opinioned as happy.

RECOMMENDATIONS OF THE STUDY

- Libraries need to improve the infrastructural requirements to provide to the needs of the users.
- The institutional libraries should be opened during holidays, and the working hours should be increased to meet the users' needs.
- The library information professionals should digitize rare collections in the library.
- The library should conduct awareness among the users about the availability of various electronic information resources.
- Library professionals should regularly conduct orientation programs about the usage of the resources based on the users' levels.

- The library should provide standard electronic databases (Elsevier Science direct, emerald, Springer, etc.)
- The procurement of electronic information resources should be by the user information needs.

CONCLUSION

The research exposed the various factors that influenced electronic information resource usage and their level of use. It is observed that few engineering college libraries are not providing adequate electronic information resources to the students and the faculty due to high technical requirements in establishing an electronic environment in the libraries. There is a need to develop technological infrastructure and conduct orientation and training programs for the faculty regarding the availability and usage of electronic resources. There is a need to increase the collection of electronic information resources in the individual college libraries to meet the users' changing needs as per the prevailing trends.

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